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TERMINAL (ENTER 1, 2, 3, OR ?):2

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 14:45:38 ON 05 DEC 2005

=> file reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY 0.21	TOTAL SESSION 0.21
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FILE 'REGISTRY' ENTERED AT 14:46:00 ON 05 DEC 2005
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 4 DEC 2005 HIGHEST RN 869277-23-6
DICTIONARY FILE UPDATES: 4 DEC 2005 HIGHEST RN 869277-23-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> E "RLIP76"/CN 25
E1 1 RLGS1930 PROTEIN (HUMAN CLONE DNA84920 GENE UNQ1930)/CN
E2 1 RLH 033/CN
E3 0 --> RLIP76/CN
E4 1 RLIP76 PROTEIN (HUMAN)/CN
E5 1 RLK PROTEIN TYROSINE KINASE/CN
E6 1 RLK TYROSINE KINASE/CN
E7 1 RLK5 RECEPTOR-LIKE PROTEIN KINASE/CN
E8 1 RLL1 PROTEINS/CN
E9 1 RLLV1833 PROTEIN (HUMAN CLONE DNA92219 GENE UNQ1833)/CN
E10 1 RLLV422 PROTEIN (HUMAN CLONE DNA44196 GENE UNQ422)/CN
E11 1 RLM/CN
E12 1 RLM 20/CN
E13 1 RLM 20, POLYMER WITH 1,2-ETHANEDIOL AND
2,6-NAPHTHALENEDICARBOXYLIC ACID, BLOCK/CN
E14 1 RLM 20, POLYMER WITH 1,4-BENZENEDICARBOXYLIC ACID AND
1,2-ETHANEDIOL, BLOCK/CN
E15 1 RLM 20, POLYMER WITH 1,4-BENZENEDICARBOXYLIC ACID,
1,2-ETHANEDIOL AND 2,6-NAPHTHALENEDICARBOXYLIC ACID, BLOCK/CN
E16 1 RLM 20, POLYMER WITH CARBONIC DICHLORIDE AND
4,4'-(1-METHYLETHYLIDENE)BIS(PHENOL), BLOCK/CN
E17 1 RLN3 PROTEIN (HUMAN CLONE DNA171372 GENE UNQ6188)/CN
E18 1 RLNI6974 PROTEIN (HUMAN CLONE DNA179765 GENE UNQ6974)/CN
E19 1 RLO 6078/CN
E20 1 RLOC PROTEIN (CAMPYLOBACTER JEJUNI RM1221 STRAIN RM1221)/CN
E21 1 RLOG PROTEIN (CAMPYLOBACTER JEJUNI RM1221 STRAIN RM1221)/CN
E22 1 RLP 024/CN

E23 1 RLP 068/CN
E24 1 RLP 2078/CN
E25 1 RLP-1 (RAB-LIKE SMALL GTP-BINDING PROTEIN 1) (HUMAN CLONE
PHC069) /CN

=> S E4
L1 1 "RLIP76 PROTEIN (HUMAN) "/CN

=> DIS L1 1 SQIDE
THE ESTIMATED COST FOR THIS REQUEST IS 6.15 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:N
REQUEST CANCELED

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
SESSION
FULL ESTIMATED COST 5.03 5.24

FILE 'CAPLUS' ENTERED AT 14:46:43 ON 05 DEC 2005
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FILE COVERS 1907 - 5 Dec 2005 VOL 143 ISS 24
FILE LAST UPDATED: 4 Dec 2005 (20051204/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> S L1
L2 6 L1

=> d proteoliposome
'PROTEOLIPOSOME' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS ----- GI and AB
ALL ----- BIB, AB, IND, RE
APPS ----- AI, PRAI
BIB ----- AN, plus Bibliographic Data and PI table (default)
CAN ----- List of CA abstract numbers without answer numbers
CBIB ----- AN, plus Compressed Bibliographic Data
DALL ----- ALL, delimited (end of each field identified)
DMAX ----- MAX, delimited for post-processing
FAM ----- AN, PI and PRAI in table, plus Patent Family data
FBIB ----- AN, BIB, plus Patent FAM
IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PAT5 ----- PI, SO

SAM ----- CC, SX, TI, ST, IT
SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
SCAN must be entered on the same line as the DISPLAY,
e.g., D SCAN or DISPLAY SCAN)
STD ----- BIB, IPC, and NCL

IABS ----- ABS, indented with text labels
IALL ----- ALL, indented with text labels
IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels

OBIB ----- AN, plus Bibliographic Data (original)
OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations
SIBIB ----- IBIB, no citations

HIT ----- Fields containing hit terms
HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
containing hit terms
HITRN ----- HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
its structure diagram
HITSEQ ----- HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
structure diagram, plus NTE and SEQ fields
KWIC ----- Hit term plus 20 words on either side
OCC ----- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.

ENTER DISPLAY FORMAT (BIB):end

```
=> s ?lipsome
L3          42 ?LIPSOME

=> s ?liposome
L4          33727 ?LIPOSOME

=> s liposom?
L5          48589 LIPOSOM?

=> s 14 or 15
L6          48775 L4 OR L5

=> s RLIP76 or RALBP1 or (DNP-SG) or RIPI or RLIP1
      56 RLIP76
      66 RALBP1
      7168 DNP
      89 DNPS
      7216 DNP
          (DNP OR DNPS)
```

6155 SG
766 SGS
6779 SG
(SG OR SGS)
107 DNP-SG
(DNP (W) SG)
117 RIP1
2 RLIP1
L7 321 RLIP76 OR RALBP1 OR (DNP-SG) OR RIP1 OR RLIP1

=> s 17 and 16
L8 10 L7 AND L6

=> s 18 not py>2002
3312022 PY>2002
L9 4 L8 NOT PY>2002

=> d ibib 1-4

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:586352 CAPLUS
DOCUMENT NUMBER: 135:300135
TITLE: Purification and functional reconstitution of intact
, ral-binding GTPase activating protein, RLIP76
, in artificial liposomes
AUTHOR(S): Singhal, Sharad S.; Singhal, Jyotsana; Cheng, JiZhong;
Pikula, Slawomir; Sharma, Rajendra; Zimniak, Piotr;
Awasthi, Yogesh C.; Awasthi, Sanjay
CORPORATE SOURCE: Department of Chemistry and Biochemistry, The
University of Texas at Arlington, Arlington, TX,
76019-0065, USA
SOURCE: Acta Biochimica Polonica (2001), 48(2), 551-562
CODEN: ABPLAF; ISSN: 0001-527X
PUBLISHER: Polish Biochemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:257178 CAPLUS
DOCUMENT NUMBER: 133:171724
TITLE: Glutathione-linked pathways in drug resistance.
Characterization and functional reconstitution of
human erythrocyte glutathione-conjugate transporter
Awasthi, Y. C.; Singhal, S. S.; Zimniak, P.; Piper, J.
T.; Pikula, S.; Bandorowicz-Pikula, J.; Lin, J. T.;
Srivastava, S. K.; Singh, S. V.; Awasthi, S.
CORPORATE SOURCE: Department of Human Biological Chemistry and Genetics,
Department of Internal Medicine, The University of
Texas Medical Branch, Galveston, TX, 77555-1067, USA
SOURCE: Clinical Chemistry and Enzymology Communications
(2000), 8(4-6), 431-448
CODEN: CCECEY; ISSN: 0892-2187
PUBLISHER: Harwood Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:182219 CAPLUS
DOCUMENT NUMBER: 131:27425
TITLE: ATP-Dependent Colchicine Transport by Human

AUTHOR(S): Erythrocyte Glutathione Conjugate Transporter
Awasthi, Sanjay; Singhal, Sharad S.; Pandya, Utpal;
Gopal, Sanjiv; Zimniak, Piotr; Singh, Shivendra V.;
Awasthi, Yogesh C.

CORPORATE SOURCE: Department of Internal Medicine, The University of
Texas Medical Branch at Galveston, Galveston, TX,
77555-1067, USA

SOURCE: Toxicology and Applied Pharmacology (1999), 155(3),
215-226

PUBLISHER: CODEN: TXAPPA9; ISSN: 0041-008X

DOCUMENT TYPE: Academic Press

LANGUAGE: Journal

REFERENCE COUNT: English 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:249072 CAPLUS
DOCUMENT NUMBER: 129:51304
TITLE: ATP-dependent human erythrocyte glutathione-conjugate
transporter. II. functional reconstitution of
transport activity

AUTHOR(S): Awasthi, Sanjay; Singhal, Sharad S.; Pikula, Slawomir;
Piper, John T.; Srivastava, Sanjay K.; Torman, Robert
T.; Bandorowicz-Pikula, Joanna; Lin, James T.; Singh,
Shivendra V.; Zimniak, Piotr; Awasthi, Yogesh C.

CORPORATE SOURCE: Departments of Internal Medicines, The University of
Texas Medical Branch, Galveston, TX, USA

SOURCE: Biochemistry (1998), 37(15), 5239-5248

PUBLISHER: CODEN: BICBWA; ISSN: 0006-2960

DOCUMENT TYPE: American Chemical Society

LANGUAGE: Journal

REFERENCE COUNT: English 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ab 1

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AB We have recently shown that RLIP76, a ral-binding GTPase
activating protein, mediates ATP-dependent transport of
glutathione-conjugates (GS-E) and doxorubicin (DOX) (S. Awasthi et al.,
Biochem. 39, 9327, 2000). Transport function of RLIP76 was
found to be intact despite considerable proteolytic fragmentation in
preps. used for those studies, suggesting either that the residual intact
RLIP76 was responsible for transport activity, or that the
transport activity could be reconstituted by fragments of RLIP76
If the former were true, intact RLIP76 would have a much
higher specific activity for ATP-hydrolysis than the fragmented protein.
We have addressed this question by comparing transport properties of
recombinant RLIP76 and human erythrocyte membrane RLIP76
purified in buffers treated with either 100 or 500 μ M serine protease
inhibitor, PMSF. The purity and identity of recombinant and human
erythrocyte RLIP76 was established by SDS/PAGE and Western-blot
anal. These studies confirmed the origin of the 38 kDa protein,
previously referred to as DNP-SG ATPase, from
RLIP76. Higher PMSF concentration resulted in lower yield of the 38 kDa
band and higher yield of intact RLIP76 from both human and
recombinant source. In contrast, the substrate-stimulated ATPase activity
in presence of DNP-SG, doxorubicin, daunorubicin, or
colchicine were unaffected by increased PMSF; similarly, ATP-dependent
transport of doxorubicin in proteoliposomes reconstituted with
RLIP76 was unaffected by higher PMSF. These results indicated

that limited proteolysis by serine proteases does not abrogate the transport function of RLIP76. Comparison of transport kinetics for daunorubicin between recombinant vs. human erythrocyte RLIP76 revealed higher specific activity of transport for tissue purified RLIP76, indicating that addnl. factors present in tissue purified RLIP76 can modulate its transport activity.

=> d ab 2

L9 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AB The glutathione-conjugate transporter, S-(2,4-Dinitrophenyl) glutathione (DNP-SG) ATPase described by the authors previously was purified from human erythrocytes. DNP-SG ATPase showed a band at 38 kDa in SDS gels which was not recognized by the monoclonal antibodies against multidrug resistance associated protein (MRP). A saturable photoaffinity labeling of the 38 kDa band was observed with 8-azido ATP ($K_d = 2 \mu M$). The transporter catalyzed ATP hydrolysis which was stimulated in the presence of glutathione-conjugate of 1-chloro-2,4-dinitro benzene (DNP-SG) as well as the cationic amphiphilic chemotherapeutic drug, doxorubicin (DOX). When reconstituted in artificial liposomes, DNP-SG ATPase mediated ATP-dependent, saturable transport of DOX ($K_m 2.4 \mu M$, $V_{max} 194 \text{ nmol/min/mg}$) as well as DNP-SG ($K_m 36 \mu M$, $V_{max} 433 \text{ nmol/min/mg}$). The K_m for ATP for both substrates was about 2.5 mM. Transport of DOX was competitively inhibited by DNP-SG and vice versa.

=> file medline

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	30.00	35.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.46	-1.46

FILE 'MEDLINE' ENTERED AT 14:51:24 ON 05 DEC 2005

FILE LAST UPDATED: 3 DEC 2005 (20051203/UP). FILE COVERS 1950 TO DATE.

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow prompt (=>). See also:

<http://www.nlm.nih.gov/mesh/>
http://www.nlm.nih.gov/pubs/techbull/nd04/nd04_mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s RLIP76 or RALBP1 or (DNP-SG) or RIP1 or RLIP1
31 RLIP76
62 RALBP1
3965 DNP
46 DNPS
3989 DNP

(DNP OR DNPS)

2746 SG
464 SGS
3117 SG
(SG OR SGS)

93 DNP-SG
(DNP (W) SG)
61 RIP1
1 RLIP1

L10 200 RLIP76 OR RALBP1 OR (DNP-SG) OR RIP1 OR RLIP1

=> s ?liposome
L11 8620 ?LIPOSOME

=> s ?liposom?
L12 31490 ?LIPOSOM?

=> s 112 and 110
L13 16 L12 AND L10

=> s 113 not py>2002
1725411 PY>2002
L14 8 L13 NOT PY>2002

=> s 114 not py>2001
2267130 PY>2001
L15 5 L14 NOT PY>2001

=> d ibib 1-5

L15 ANSWER 1 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2001686403 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11732624
TITLE: Purification and functional reconstitution of intact
ral-binding Gtpase activating protein, RLIP76, in
artificial liposomes.
AUTHOR: Singhal S S; Singhal J; Cheng J; Pikula S; Sharma R;
Zimniak P; Awasthi Y C; Awasthi S
CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of
Texas at Arlington, 76019-0065, USA.
CONTRACT NUMBER: CA77495 (NCI)
GM32304 (NIGMS)
SOURCE: Acta biochimica Polonica, (2001) 48 (2) 551-62.
Journal code: 14520300R. ISSN: 0001-527X.
PUB. COUNTRY: Poland
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200205
ENTRY DATE: Entered STN: 20011205
Last Updated on STN: 20020529
Entered Medline: 20020528

L15 ANSWER 2 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2001354912 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11300797
TITLE: Functional reassembly of ATP-dependent xenobiotic transport
by the N- and C-terminal domains of RLIP76 and
identification of ATP binding sequences.
AUTHOR: Awasthi S; Cheng J Z; Singhal S S; Pandya U; Sharma R;
Singh S V; Zimniak P; Awasthi Y C
CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of
Texas at Arlington, 76019-0065, USA.. sawasthi@uta.edu
CONTRACT NUMBER: CA 77495 (NCI)

ES09140 (NIEHS)
GM 32304 (NIGMS)

SOURCE: Biochemistry, (2001 Apr 3) 40 (13) 4159-68.
Journal code: 0370623. ISSN: 0006-2960.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010625
Last Updated on STN: 20010625
Entered Medline: 20010621

L15 ANSWER 3 OF 5 MEDLINE on STN
ACCESSION NUMBER: 2000417526 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10924126
TITLE: Novel function of human RLIP76: ATP-dependent transport of glutathione conjugates and doxorubicin.
AUTHOR: Awasthi S; Cheng J; Singhal S S; Saini M K; Pandya U; Pikula S; Bandorowicz-Pikula J; Singh S V; Zimniak P; Awasthi Y C
CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of Texas at Arlington, 76019-0065, USA.. sawasthi@uta.edu
CONTRACT NUMBER: CA 55589 (NCI)
CA 77495 (NCI)
GM 32304 (NIGMS)
SOURCE: Biochemistry, (2000 Aug 8) 39 (31) 9327-34.
Journal code: 0370623. ISSN: 0006-2960.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ENTRY DATE: Entered STN: 20000915
Last Updated on STN: 20000922
Entered Medline: 20000907

L15 ANSWER 4 OF 5 MEDLINE on STN
ACCESSION NUMBER: 1999180685 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10079207
TITLE: ATP-Dependent colchicine transport by human erythrocyte glutathione conjugate transporter.
AUTHOR: Awasthi S; Singhal S S; Pandya U; Gopal S; Zimniak P; Singh S V; Awasthi Y C
CORPORATE SOURCE: Department of Internal Medicine, The University of Texas Medical Branch at Galveston, Galveston, Texas, 77555-1067, USA.. sawasthi@utmb.edu
CONTRACT NUMBER: CA-77495 (NCI)
ES-09140 (NIEHS)
GM-32304 (NIGMS)
SOURCE: Toxicology and applied pharmacology, (1999 Mar 15) 155 (3) 215-26.
Journal code: 0416575. ISSN: 0041-008X.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199904
ENTRY DATE: Entered STN: 19990426
Last Updated on STN: 19990426
Entered Medline: 19990415

L15 ANSWER 5 OF 5 MEDLINE on STN
ACCESSION NUMBER: 1998215649 MEDLINE

DOCUMENT NUMBER: PubMed ID: 9548755
TITLE: ATP-Dependent human erythrocyte glutathione-conjugate transporter. II. Functional reconstitution of transport activity.
AUTHOR: Awasthi S; Singhal S S; Pikula S; Piper J T; Srivastava S K; Torman R T; Bandorowicz-Pikula J; Lin J T; Singh S V; Zimniak P; Awasthi Y C
CORPORATE SOURCE: Department of Internal Medicine, The University of Texas Medical Branch, Galveston, Texas, USA.. sawasthi@utmb.edu
CONTRACT NUMBER: CA63660 (NCI)
CA55589 (NCI)
GM32304 (NIGMS)
SOURCE: Biochemistry, (1998 Apr 14) 37 (15) 5239-48.
Journal code: 0370623. ISSN: 0006-2960.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199805
ENTRY DATE: Entered STN: 19980520
Last Updated on STN: 19980520
Entered Medline: 19980514

=> d his

(FILE 'HOME' ENTERED AT 14:45:38 ON 05 DEC 2005)

FILE 'REGISTRY' ENTERED AT 14:46:00 ON 05 DEC 2005
E "RLIP76"/CN 25

L1 1 S E4

FILE 'CPLUS' ENTERED AT 14:46:43 ON 05 DEC 2005

L2 6 S L1
L3 42 S ?LIPSOME
L4 33727 S ?LIPOSOME
L5 48589 S LIPOSOM?
L6 48775 S L4 OR L5
L7 321 S RLIP76 OR RALBP1 OR (DNP-SG) OR RIP1 OR RLIP1
L8 10 S L7 AND L6
L9 4 S L8 NOT PY>2002

FILE 'MEDLINE' ENTERED AT 14:51:24 ON 05 DEC 2005

L10 200 S RLIP76 OR RALBP1 OR (DNP-SG) OR RIP1 OR RLIP1
L11 8620 S ?LIPOSOME
L12 31490 S ?LIPOSOM?
L13 16 S L12 AND L10
L14 8 S L13 NOT PY>2002
L15 5 S L14 NOT PY>2001

=> s l14 not l15
L16 3 L14 NOT L15

=> d ibib 1-3

L16 ANSWER 1 OF 3 MEDLINE on STN
ACCESSION NUMBER: 2003084700 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12422239
TITLE: Functional reconstitution of Ral-binding GTPase activating protein, RLIP76, in proteoliposomes catalyzing ATP-dependent transport of glutathione conjugate of 4-hydroxynonenal.
AUTHOR: Sharma Rajendra; Sharma Abha; Yang Yusong; Awasthi Sanjay; Singhal Sharad S; Zimniak Piotr; Awasthi Yogesh C

CORPORATE SOURCE: Department of Human Biological Chemistry and Genetics,
University of Texas Medical Branch, Galveston, TX
77555-0647, USA.

CONTRACT NUMBER: CA 77495 (NCI)
GM32304 (NIGMS)

SOURCE: Acta biochimica Polonica, (2002) 49 (3) 693-701.
Journal code: 14520300R. ISSN: 0001-527X.

PUB. COUNTRY: Poland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200309

ENTRY DATE: Entered STN: 20030225
Last Updated on STN: 20030906
Entered Medline: 20030905

L16 ANSWER 2 OF 3 MEDLINE on STN
ACCESSION NUMBER: 2003035514 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12545192

TITLE: Transport functions and physiological significance of 76
kDa Ral-binding GTPase activating protein (RLIP76
).

AUTHOR: Awasthi Sanjay; Sharma Rajendra; Yang Yusong; Singhal
Sharad S; Pikula Slawomir; Bandorowicz-Pikula Joanna; Singh
Shivendra V; Zimniak Piotr; Awasthi Yogesh C

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of
Texas at Arlington, Arlington, TX, USA.

CONTRACT NUMBER: CA 55589 (NCI)
CA 77495 (NCI)
GM 32304 (NIGMS)

SOURCE: Acta biochimica Polonica, (2002) 49 (4) 855-67. Ref: 65
Journal code: 14520300R. ISSN: 0001-527X.

PUB. COUNTRY: Poland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200401

ENTRY DATE: Entered STN: 20030125
Last Updated on STN: 20040106
Entered Medline: 20040105

L16 ANSWER 3 OF 3 MEDLINE on STN
ACCESSION NUMBER: 2002673242 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12433796

TITLE: RLIP76, a novel transporter catalyzing
ATP-dependent efflux of xenobiotics.

AUTHOR: Awasthi Sanjay; Sharma Rajendra; Singhal Sharad S; Zimniak
Piotr; Awasthi Yogesh C

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of
Texas at Arlington, Arlington, Texas.

CONTRACT NUMBER: CA 77495 (NCI)
GM32304 (NIGMS)

SOURCE: Drug metabolism and disposition: biological fate of
chemicals, (2002 Dec) 30 (12) 1300-10. Ref: 60
Journal code: 9421550. ISSN: 0090-9556.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200305

ENTRY DATE: Entered STN: 20021116
Last Updated on STN: 20030514
Entered Medline: 20030513

=> d ab 1

L16 ANSWER 1 OF 3 MEDLINE on STN
AB Earlier studies from our laboratories have shown that RLIP76, a previously described Ral-binding GTPase activating protein (Jullien-Flores et al., 1995, J. Biol. Chemical 270: 22473), is identical with the xenobiotic transporter DNP-SG ATPase, and can catalyze ATP-dependent transport of glutathione-conjugates as well as doxorubin (Awasthi et al., 2000, Biochemistry, 39: 9327). We have now reconstituted purified bacterially expressed RLIP76 in proteoliposomes, and have studied ATP-dependent uptake of the glutathione conjugate of 4-hydroxynonenal (GS-HNE) by these vesicles. Results of these studies show that RLIP76 reconstituted in proteoliposomes catalyzes ATP-dependent transport of GS-HNE against a concentration gradient. The transport of GS-HNE is saturable with respect to ATP as well as GS-HNE with $K(m)$ values of 1.4mM and 2.5 microM, respectively. These studies demonstrate that RLIP76 mediates active transport of GS-HNE, and are consistent with our previous work showing that RLIP76-mediated efflux of GS-HNE regulates the intracellular concentration of 4-HNE and thereby affects 4-HNE mediated signaling.

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.93	38.17
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.46

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FILE LAST UPDATED: 1 DEC 2005 <20051201/UP>
MOST RECENT UPDATE WEEK: 200547 <200547/EW>
FILE COVERS 1978 TO DATE

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>>> KWIC format free of charge - SEE NEWS >>>

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE
http://www.stn-international.de/stndatabases/details/ ipc_reform.html <

=> s RLIP76 or RALBP1 or (DNP-SG) or RIP1 or RLIP1
17 RLIP76
19 RALBP1
1876 DNP
25 DNPS
1897 DNP
(DNP OR DNPS)
12529 SG
944 SGS
13265 SG
(SG OR SGS)
6 DNP-SG
(DNP(W) SG)
56 RIP1

```
    1 RLIP1
L17    94 RLIP76 OR RALBP1 OR (DNP-SG) OR RIP1 OR RLIP1

=> s 117/ab
    0 RLIP76/AB
    0 RALBP1/AB
    17 DNP/AB
    173 SG/AB
    10 SGS/AB
    181 SG/AB
        ((SG OR SGS)/AB)
    0 DNP-SG/AB
        ((DNP(W) SG)/AB)
    0 RIP1/AB
    0 RLIP1/AB
L18    0 (RLIP76/AB OR RALBP1/AB OR (DNP-SG/AB) OR RIP1/AB OR RLIP1/AB)

=> s 117/clm
    1 RLIP76/CLM
    1 RALBP1/CLM
    168 DNP/CLM
    2780 SG/CLM
    1 DNP-SG/CLM
        ((DNP(W) SG)/CLM)
    2 RIP1/CLM
    0 RLIP1/CLM
L19    5 (RLIP76/CLM OR RALBP1/CLM OR (DNP-SG/CLM) OR RIP1/CLM OR RLIP1/CLM)
```

```
=> ?liposom?
?LIPOSOM? IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
```

```
=> s ?liposom?
L20    40497 ?LIPOSOM?
```

```
=> s 120/clm
LEFT TRUNCATION IGNORED FOR '?LIPOSOM?' FOR FILE 'PCTFULL'
L21    4950 (LIPOSOM?/CLM)
Left truncation is not valid in the specified search field in the
specified file. The term has been searched without left truncation.
Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID'
would be searched as 'FLAVONOID.'
```

If you are searching in a field that uses implied proximity, and you used a truncation symbol after a punctuation mark, the system may interpret the truncation symbol as being at the beginning of a term. Implied proximity is used in search fields indexed as single words, for example, the Basic Index.

```
=> s 121 and 119
L22    0 L21 AND L19
```

```
=> s proteoliposom?
L23    430 PROTEOLIPOSOM?
```

```
=> s 123 and 119
L24    0 L23 AND L19
```

```
=> s 117 and 124
L25    0 L17 AND L24
```

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.15	41.32
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.46

STN INTERNATIONAL LOGOFF AT 14:56:05 ON 05 DEC 2005